



### COARSE MATERIAL WASHER

Eagle Coarse Material Washers provide light to moderate scrubbing and washing to remove soluble clays and dust coatings that are encountered in natural and crushed stone applications. The scrubbing and attrition of deleterious materials is accomplished by the action of the corrugated paddles cutting through the slurry. This action results in particle on particle scrubbing to promote the separation of coatings from the coarse aggregate. The combined action of the paddles along with the rolling and tumbling generated by the rotating spirals releases deleterious materials from the product material into the overflowing wastewater.

Each Eagle Coarse Material Washer is fabricated with a rising current manifold to provide an upward current of water to assist in removing unwanted materials. Deleterious materials of light specific gravity such as twigs, sticks, and lightweight coals are floated by the rising current of water and the jiggling action of the paddles within the tub. The deleterious materials are then removed by the overflowing wastewater.

Due to the varying types of materials each Eagle Coarse Material Washer will encounter, each washer can be configured to meet specific scrubbing needs by adding more paddles to the conveying shaft(s). Additional paddles allow material to be retained in the tub area for additional scrubbing.

#### OPTIONAL EQUIPMENT

Discharge Chute | Washer Supports | Safety Covers | Pillow-Block Rear Bearing(s)

Note: 44" Single & Double Coarse Material Washers feature formed steel spirals and paddle hubs which are welded to the shaft.

### DESIGN FEATURES

- Eagle's designed and built Heavy Duty Gear Reducer
- Extra-thick, one piece shaft tubing
- Replaceable Eagle Armor wear shoes and Paddles
- Six set of paddles standard
- Paddle and flight sections easily changeable in the field
- Number of paddles on shaft can be increased to improve scrubbing
- Heavy-duty cast hubs also provide shaft wear protection
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- Washer tub is Fabricated with thick gauge steel
- Close clearance curved plate runs entire length of shaft
- Adjustable end weir for improving trash removal capabilities
- Rising Current Manifold
- Spherical-roller rear grease bearing(s)
- High-efficiency electric motor(s)

## Single Screw Coarse Material Washers

Size (Dia. x Length)	Maximum Capacity	Maximum Material Size	Water Required	Electric Motor	Shaft (RPM)	Machine Wt. Empty	Machine Wt. Operating
22" x 18' (558 mm x 5.4 m)	45 to 55 STPH (40.8 to 49.9 MTPH)	2" (50 mm)	250 to 350 USGPM (56.7 to 79.4 m <sup>3</sup> /hour)	10 HP (7 kW)	40	6,050 lb (2744.2 kg)	10,650 lb (4830.7 kg)
24" x 18' (609 mm x 5.4 m)	60 to 75 STPH (54.4 to 68.0 MTPH)	2" (50 mm)	300 to 400 USGPM (68.1 to 90.8 m <sup>3</sup> /hour)	15 HP (11 kW)	40	7,100 lb (3220.5 kg)	15,350 (6962.6 kg)
30" x 18' (762 mm x 5.4 m)	100 to 125 STPH (90.7 to 113.4 MTPH)	2.5" (63 mm)	350 to 450 USGPM (79.4 to 102.2 m <sup>3</sup> /hour)	20 HP (15 kW)	35	9,450 lb (4286.4 kg)	22,250 lb (10092.4 kg)
36" x 18' (914 mm x 5.4 m)	150 to 175 STPH (136.0 to 158.7 MTPH)	2.5" (63 mm)	400 to 600 USGPM (90.8 to 136.2 m <sup>3</sup> /hour)	30 HP (22 kW)	32	12,150 lb (5511.1 kg)	30,350 lb (13766.5 kg)

## Double Screw Coarse Material Washers

Size (Dia. x Length)	Maximum Capacity	Maximum Material Size	Water Required	Electric Motor	Shaft (RPM)	Machine Wt. Empty	Machine Wt. Operating
30" x 18' (762 mm x 5.4 m)	200 to 250 STPH (181.4 to 226.8 MTPH)	2.5" (50 mm)	600 to 800 USGPM (136.2 to 181.7 m <sup>3</sup> /hour)	2 x 20 HP (30 kW)	35	17,150 lb (7779.1 kg)	35,350 lb (16034.4 kg)
36" x 18' (914 mm x 5.4 m)	300 to 350 STPH (272.1 to 317.5 MTPH)	2.5" (50 mm)	700 to 900 USGPM (158.9 to 207.4 m <sup>3</sup> /hour)	2 x 30 HP (45 kW)	32	22,000 lb (9979.0 kg)	49,800 lb (22588.9 kg)
44" x 20' (1117 mm x 6.0 m)	400 to 500 STPH (362.8 to 453.5 MTPH)	3" (76 mm)	900 to 1,100 USGPM (207.4 to 249.8 m <sup>3</sup> /hour)	2 x 40 HP (60 kW)	26	34,400 lb (15603.5 kg)	69,000 lb (31297.8 kg)
48" x 24' (1219 mm x 7.3 m)	500 to 600 STPH (453.5 to 544.3 MTPH)	3" (76 mm)	1,200 to 1,400 USGPM (272.5 to 317.9 m <sup>3</sup> /hour)	2 x 75 HP (112 kW)	26	39,590 lb (17957.7 kg)	97,740 lb (44334.1 kg)

### Paddles and Shaft - Coarse Material Washer



A look inside at the paddles and shaft of a coarse material screw washer.